NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

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1724 F Street, Northwest Washington 25, D. C.

M.L. 282 (Monthly list of documents released by the NACA during September 1950)

Libraries in most of the important cities throughout the country, as well as libraries of schools, manufacturers, and other organizations dealing with aeronautics, are supplied copies of these publications for reference.

TECHNICAL NOTES

- TN 2167 Sonic-Flow-Orifice Temperature Probe for High-Gas-Temperature Measurements.

 By: Perry L. Blackshear, Jr.
- TN 2168 Experimental Investigation of the Effect of Vertical-Tail Size and Length and of Fuselage Shape and Length on the Static Lateral Stability Characteristics of a Model with 45° Sweptback Wing and Tail Surfaces.

 By: M. J. Queijo and Walter D. Wolhart.
- TN 2171 Investigation of a Two-Step Nozzle in the Langley 11-Inch Hypersonic Tunnel.

 By: Charles H. McLellan, Thomas W. Williams, and Mitchel H. Bertram.
- TN 2177 Low-Speed Characteristics of Four Cambered, 10-Percent-Thick NACA Airfoil Sections.

 By: George B. McCullough and William M. Haire.
- TN 2178 Method for Determining Optimum Division of Power between Jet and Propeller for Maximum Thrust Power of a Turbine-Propeller Engine.

 By: Arthur M. Trout and Eldon W. Hall.
- TN 2179 Turning-Angle Design Rules for Constant-Thickness Circular-Arc Inlet Guide Vanes in Axial Annular Flow.

 By: Seymour Lieblein.
- TN 2180 Effectiveness of Molybdenum Disulfide as a Fretting-Corrosion Inhibitor.

 By: Douglas Godfrey and Edmond E. Bisson.
- TN 2181 The Aerodynamic Forces and Moments on a $\frac{1}{10}$ -Scale Model of a Fighter Airplane in Spinning Attitudes as Measured on a Rotary Balance in the Langley 20-Foot Free-Spinning Tunnel.

 By: Ralph W. Stone, Jr., Sanger M. Burk, Jr., and William Bihrle, Jr.

TECHNICAL NOTES



- TN 2182 Analysis of Effect of Variations in Primary Variables on Time Constant and Turbine-Inlet-Temperature Overshoot of Turbojet Engine.

 By: Marcus F. Heidmann.
- TN 2183 Analysis for Control Application of Dynamic Characteristics of Turbojet Engine with Tail-Pipe Burning.

 By: Melvin S. Feder and Richard Hood.
- TN 2184 Investigation of Frequency-Response Characteristics of Engine Speed for a Typical Turbine-Propeller Engine.

 By: Burt L. Taylor, III, and Frank L. Oppenheimer.
- TN 2185 Analytical Determination of Coupled Bending-Torsion Vibrations of Cantilever Beams by Means of Station Functions.

 By: Alexander Mendelson and Selwyn Gendler.
- TN 2186 Method for Determining Pressure Drop of Air Flowing through Constant-Area Passages for Arbitrary Heat-Input Distributions.

 By: Benjamin Pinkel, Robert N. Noyes, and Michael F. Valerino.
- TN 2187 Bonding Investigation of Titanium Carbide with Various Elements. By: Walter J. Engel.
- TN 2188 Experimental Investigation of Stiffened Circular Cylinders Subjected to Combined Torsion and Compression.

 By: James P. Peterson.
- TN 2192 A Survey of the Flow at the Plane of the Propeller of a Twin-Engine Airplane.

 By: John C. Roberts and Paul F. Yaggy.

TECHNICAL MEMORANDUMS

- TM 1268 Isentropic Phase Changes in Dissociating Gases and the Method of Sound Dispersion for the Investigation of Homogeneous Gas Reactions with Very High Speed.

 By: Gerhard Damkohler.
- TM 1269 Isentropic Phase Changes in Dissociating Gases and the Method of Sound Dispersion for the Investigation of Homogeneous Gas Reactions with Very High Speed.

 By: Gerhard Damkohler.

MISCELLANEOUS

Lecture - "Application of High-Speed Computing in Aeronautical Research," by Hugh L. Dryden. (Paper presented at the Washington Meeting of the Association for Computing Machinery, Shoreham Hotel, September 9, 1950)